

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 032/04082	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/IL2004/001168	International filing date (day/month/year) 26/12/2004	(Earliest) Priority Date (day/month/year) 15/01/2004
Applicant ALGOTEC SYSTEMS LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

**4. With regard to the title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regard to the drawings,**

a. the figure of the drawings to be published with the abstract is Figure No. 3A-3B

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IL2004/001168

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G06T17/50 G06T5/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SETHIAN J A: "Evolution, implementation, and application of level set and fast marching methods for advancing fronts" JOURNAL OF COMPUTATIONAL PHYSICS ACADEMIC PRESS USA, vol. 169, no. 2, 20 May 2001 (2001-05-20), pages 503-555, XP002325672 ISSN: 0021-9991 the whole document</p> <p style="text-align: center;">----- -/--</p>	1-33

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

21 April 2005

Date of mailing of the international search report

10/05/2005

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IL2004/001168

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SETHIAN J A: "A fast marching levelset method for monotonically advancing fronts" NAT. ACAD. SCI. 93(4), 'Online! 1996, pages 1591-1595, XP002325671 Retrieved from the Internet: URL: <a href="http://math.berkeley.edu/~sethian/Papers/sethian.fastmarching.pdf.gz">http://math.berkeley.edu/~sethian/Papers/sethian.fastmarching.pdf.gz</a> 'retrieved on 2005-04-21! cited in the application the whole document</p>	1-33
A	<p>US 2002/100009 A1 (XING ZHAOYUN ET AL) 25 July 2002 (2002-07-25) the whole document</p>	1-33
A	<p>MELCHIOR P ET AL: "Consideration of obstacle danger level in path planning using A&lt;*&gt; and Fast-Marching optimisation: comparative study" SIGNAL PROCESSING, AMSTERDAM, NL, vol. 83, no. 11, November 2003 (2003-11), pages 2387-2396, XP004463300 ISSN: 0165-1684 cited in the application the whole document</p>	1-33
A	<p>DESCHAMPS T ET AL: "Fast extraction of minimal paths in 3D images and applications to virtual endoscopy" MEDICAL IMAGE ANALYSIS, OXFORD UNIVERSITY PRESS, OXOFRD, GB, vol. 5, 2001, pages 281-299, XP002904305 ISSN: 1361-8415 cited in the application the whole document</p>	1-33
A	<p>LIVINGSTONE D ET AL: "Fast marching and fast driving: combining off-line search and reactive A.I." 4TH INTERNATIONAL CONFERENCE ON INTELLIGENT GAMES AND SIMULATION (GAME-ON 2003), November 2003 (2003-11), XP002325673 UK cited in the application the whole document</p>	1-33
A	<p>US 6 604 005 B1 (DORST LEENDERT ET AL) 5 August 2003 (2003-08-05) cited in the application the whole document</p>	1-33

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# INTERNATIONAL SEARCH REPORT

**International Application No**

PCT/IL2004/001168

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 6 324 478 B1 (POPOVICI ALEXANDER M ET AL) 27 November 2001 (2001-11-27)  cited in the application  the whole document</p> <p>-----</p>	1-33
A	<p>US 6 496 188 B1 (DESCHAMPS THOMAS ET AL) 17 December 2002 (2002-12-17)  cited in the application  the whole document</p> <p>-----</p>	1-33

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IL2004/001168

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			US 5220497 A	15-06-1993
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